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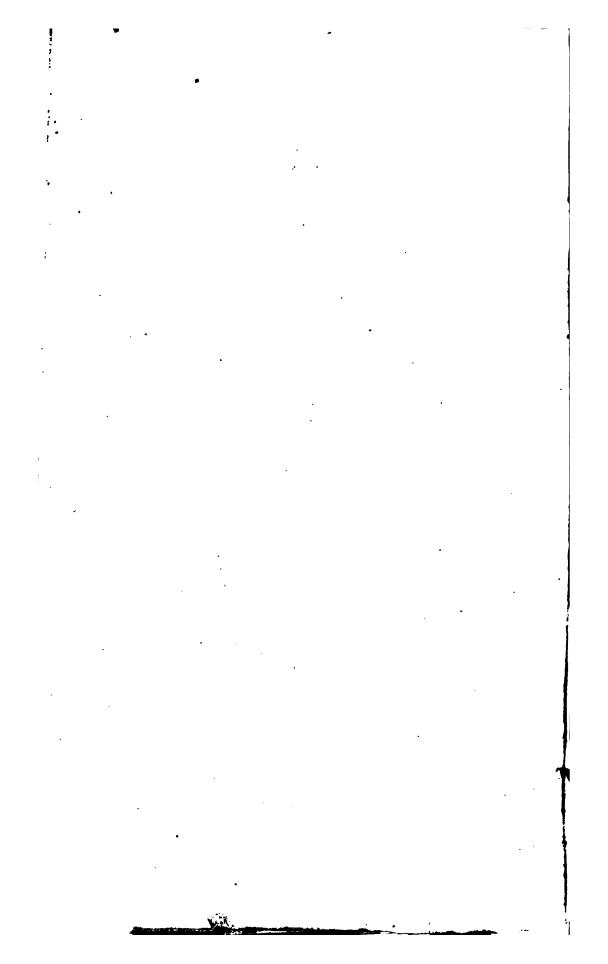


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Capt , JOHN GOODRIDGE, Aged 71
Late Commander of one of His . Majesty's

Packet Boats Station'd at Falmouth :-

# P H OE N I X,

A N

E S S A Y.

BEING AN

ATTEMPT TO PROVE FROM HISTORY

ASTRONOMICAL CALCULATIONS,

THAT

THE COMET,

WHICH .

BY ITS APPROXIMATION TO OUR EARTH,

occasioned the change made

AT THE FALL AND AT THE DELUGE,

REAL PHŒNIX OF THE ANCIENTS.

## By JOHN GOODRIDGE.

LONDON:

PRINTED FOR WELLS AND GROSVENOR, No, 11. CORNHILL.

M DCC LXXXI.

<sup>&</sup>quot;The Worlds were tramed by the Word of God."
HEB. xi. 3.

<sup>&</sup>quot;By his Spirit he hath garnished the Heavens."

JOB. xvi. 13.

The Worlds are removed at the Will of God.



41-11-1904)

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A ...

A 8 many of my friends have infifted that a Dedication is necessary I shall (though not very fashionable) dedicate my book to the publick in general, for whom I first intended writing it, and to my contributors in particular, some of whom have subscribed for several copies as may be seen by the catatalogue; there are also many gentlemen and ladies who have interested themselves in my behalf, by which means many names have been added to the list, which enables me to lay my work

before the publick, for without their asfistance, I should not have committed it to the press: An expedient which affords me a much greater prospect of having my wish accomplished; that of my work's existing till the next return of the Phænix, for the more general it may be at that time, of the more benefit I hope it will prove to the then inhabitants. As it appears that I have extended my love and regard fo far as to the last of Adam's race upon earth, it cannot I think with justice be thought I have less of either, for the present generation, or for all the fons and daughters of Adam during the intermediate time. In perufing my work, the readers will I hope find no improper advice, nor any thing in the least militating against the christian religion, but the contrary, as it proves,

in

in my opinion, the power of that Being who has no equal; nevertheless I have met with some persons who have charged me with denying the Scriptures, in making the days of creation so many years; and in pointing out the time of the conflagration: to the first I have replied, fearch the Scriptures (for in them you have eternal life); and whoever will read the Old Testament with attention, will find that a day and a year is often mentioned, as fignifying one and the same, which I think rather argues, that the fix days of creation were so many years. And as to when the conflagration is to take place, I have not in the least hinted either the day or month in which it may happen, nor have I attempted to confine the time to a fingle year; but (unless it should please God to alter the course of

the

the Comet) I am confident it will happen some time in the year 2255 or 6. I should therefore think it presumptuous to point out the day; fully assured in the first place, that it is not in the power of man to determine it, as may be observed by reading the work; in the next place, our Saviour himself has declared that none knoweth the day but the Father. If I have been attacked by my acquaintance, what may I not expect from the ill-natured criticks, if such there are? though when I tell them that my production is the labour of an old man worn out at sea, he hopes they will not be severe with him. As I think and believe that my doctrine will not be much relished in this age of politeness and disfination, and I am afraid in too many a want of religion, I nevertheless hope it will

will meet with encouragement from the well disposed; I shall therefore beg leave to assure those gentlemen and ladies, who from a principle of generosity, have not only promoted my work by liberal subscriptions, but have likewise assisted me with their interest, that I have a due sense of the obligation; to them then in particular, and my Subscribers in general, I return my sincere thanks, assuring them that I shall ever gratefully acknowledge (by a kind rememberance) their favours bestowed on me.

And I most willingly subscribe myself

Their devoted

And most obedient servant,

JOHN GOODRIDGE.

Flushing, 17th February, 1781.

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# PREFACE.

HEN I first sat down to write the following Essay, I had not the most distant thought of committing it to the press; my design was only to leave a few manuscript copies with my family and some particular friends, always wishing it might, if possible, be handed down to posterity until the time of the Comet's next return; but after I had got it into some forwardness, and had shewn it to my neighbouring friends and acquaintance, many of them advised me to publish it, and by subscription (though did my circumstances afford it I certainly would make the publick a present of an Impression). And although I have great diffidence in my own abilities for such a task, yet as the publishing may be a **furer** 

#### PREFACE.

furer way of handing it down, than by a few manuscripts, I the more readily entered into the design; hoping that by it posterity might be warned to consider, how nearly it will concern them to be rightly prepared to meet so terrible and sudden a change, and not to be like the inhabitants of old (Noah and his family excepted) at the coming of the slood.

It was about the year 1747, that I first determined to leave some manuscript co-What gave the first pies behind me. hint was a remarkable Comet which appeared in the year 1743-4, which continued to shine for almost the whole month of February. I was at Oporto when I saw it first, and though from the length of its tail it must have been visible before, I believe I was the first person that saw it there. As I sailed for England in four days after, I had an opportunity of seeing it almost every night during a great part of the passage; and by the time

## PREFACE,

time I had gained about midway between Cape Finisterre and Ushant, it had got so near the Sun that I could see it in the morning before Sun-rising, as well as after Sun-setting; it continued to appear. both morning and evening for four or five days afterwards; at last it approached fo near the Sun that its rays hid it from my fight. It emitted upwards a luminous bright beam or tail, which extended in length several degrees of the heavens; and when it was nearest the earth I imagined it might be about ten or twelve millions of miles distant from it. All the time of feeing it I had no help except a small telescope, such as is used on board ship for viewing objects at small distances, fuch as capes or headlands, rocks, thips, &c. I looked for it with impatience on its return from the Sun, but could never see it after. on which I concluded that its orbit could not be near so eccentric as I had at first I was therefore convinced imagined. b 2 that

## PREFACE.

that it could not be a Comet capable of fetting the Earth on fire, yet it nevertheless fixed me in a belief that Comets were sufficient to occasion great mutations amongst the planets.

I have said in the following sheets, that the Comet of 1680 is the only one hitherto known that is capable of causing the conslagration, and that by reason of its passing so near the Earth's orbit, both in its descent to, and ascent from, the Sun. Sir Isaac Newton, when he sirst saw it, before he had made his calculations, said, that its period must exceed five hundred years, for its orbit was so yery eccentrick, that whilst it was observed it travelled almost in a parabola.

I hope it will not be thought amiss that I have so frequently in the course of my work quoted the authority of so many authors. But as they were all men of known and approved abilities, I chose

#### PREFACE.

to have recourse to their affistance, rather than to rest too confidently on my own. As my acquaintance both with Grammar and with the Claffics is but small (which I have often lamented) correct periods and studied phrases are not to be expected. Astronomy being a science I have ever held in great esteem, I have often wished for time and opportunity for making celestial observations; but it was not to be so; the hurry and bustle of a. sea-faring life, and the care of a numerous offspring prevented. This will I hope apologise for me. And my impersect performance I hope will be looked upon with a favourable eye by all those of my friends and acquaintance into whose, hands it may fall, who although they may not agree with me in all I have advan-. ced, will I hope agree with me this one. grand point, that as Astronomy is a science, which, as it were, exalts you above the heavens, and, if I may be allowed the expression, carries you beyond all di**ftance** 

## PREFACE,

stance; so it sets forth, in a supereminent degree, the power, wisdom, and incomprehensibleness of the Great Creator. Therefore an undevout astronomer must be mad.

As I bear a love to mankind in general, so on this principle I wish, that all the present and succeeding generations upon Earth may seriously reflect how much it behoves them to stand prepared for every event by a right discharge of their duty towards God, and towards man; towards God, by awefully fearing him, worshipping and serving him with all diligence, and loving him above all other confideration; towards man, by doing to others as we would they should do unto us; for these things let us strive as we regard our own fouls, so shall we be prepared to meet Christ at His second coming, and to enter into His joy; then would my end be obtained and my weak endeavours amply rewarded, and I humbly pray

I

#### PREFACE.

unto the Lord Jehovah our God, that He will blot out all our transgressions, remit us our sins and think of our iniquities no more. And that through Jesus Christ, His beloved son, who suffered for our redemption, whom He raised from the dead, and placed at His right hand, to be our kind Intercessor, Mediator, and Great High Priest, we may all be made partakers of His righteous kingdom, and joint heirs with him in the glorious kingdom of his Father and our Father, for ever and ever

AMEN.

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## THE

## PHOENIX.

is to show that a Comet has been the cause of two grand catastrophes that have happened to this our Earth, for the punishment of its inhabitants, at the Fall and at the Deluge; which Comet (it is my intention to prove as far as I am able) is the real *Phænix* of the ancients.

But, before I proceed, I think it will first be necessary to give some account of this our Solar System, from which (were it possible) some idea may be formed of the universe immense, which contains numberless Solar Systems, perhaps in extent equal to this of which we are a B part

#### THE PHOENIX.

part; all which considered, must fill us with amazement, at the power of the Almighty Creator; who could form such prodigious systems, replete with mighty Orbs, revolving regularly round their suns as their centres. In short, the more we contemplate his power, the more is our astonishment; and I think it is a convincing proof that finite beings cannot comprehend the infinite one,

In proceeding with the work, the whole is comprehended under feven heads:

The First treats of the Solar System.

The Second of Comets in general.

The Third shows that the Heavenly Bodies move in vacuo.

The Fourth, that the fix days of creation were equal to fix years,

Fifthly, I shall endeavour to prove, that the Comet which occasioned the Deluge is the real Phanix of the ancients.

The Sixth gives reasons why the Phænix, at its next return into our regions, will occa-

occasion the Conflagration preceding the Millenium.

And Seventhly, and lastly, will be the destruction of this earth; so as to be swallowed up in that mighty body, the Sun, or be carried away into far distant regions from him, no more to be found amongst the Planetary Chorus.

First, then, the Sun, that glorious Luminary, the parent of light and heat to those several bodies, which moving round him from West to East in regular Orbits, and at stated periods, constitute that family of Planets denominated the Solar System: the Planets that are known, Astronomers have distinguished by the names of Mercury, Venus, the Earth, Mars, Jupiter, and Saturn; to which the Moon is added, though only a companion to the Earth.

The Sun, an immense globe of fire, is placed near the common centre, or lower focus of the Orbits of all the Planets

B 2 which

## THE PHOENIX.

which compose our system; his diameter is computed to be 763,000 miles; he turns round his own axis in 25 days six hours of our time, as is discovered by attending to the motion of spots on his surface, and by the attraction of the circumvolving Planets, he is agitated by a small motion round the centre of gravity of the whole system.

MERCURY, the nearest Planet to the Sun, performs his revolution round him in 87 days and 23 hours of our time, which is therefore the length of his year; but no spots being seen on his surface, by reason of his being generally within the Sun's rays, his rotation on his axis is yet unknown to us. His diameter is computed at 2600 miles, and his distance from the Sun about 36 million of miles: the light and heat he receives must be above six times as great as our's; yet is the great heat of this Planet no sufficient argument against his being inhabited; heat

and cold are relative terms, and as our earth is inhabited, it is a conclusion, was-iranted by analogick reasoning, that all other globes, which like our's revolve round the Sun, are also furnished with ishabitants: not our system of Planets only, but the numberless solar Systems; their circumvolving Planets likewise have their inhabitants, whose constitutions are suitably framed to the circumstances of their situations.

The next Planet in order is Venus, whose Diameter is 7906 miles, and her diastance from the Sun is nearly 69 millions of miles. She goes round the Sun in 224 days 17 hours of our time; but as there is a difficulty in observing her spots, her day has been differently accounted for, Observers differ so much as from 24% of our days to 14 hours of our time, which difagreement must be owing to the great difficulty of making accurate observations from her spots. When Venus appears westward

westward of the Sun, she rifes before him, and is then our morning star; when she appears east of the Sun, she rifes later, and is then called our evening star, being each in turn 290 days. Venus and Mercuryare called inferior Planets, from their Orbits being included within that of the Earth's.

The EARTH which we inhabit, is the next beyond Venus in the system, at the distance of 95 million of miles from the Sun, which it encircles in 365 days, 5 hours, 40 minutes, as measured by the time of its diurnal rotation round its own axis. The diameter of the Earth is 7970 miles, and by turning round its own axis, every twenty-four hours from west to east, it causes to its inhabitants (who conceive it to be at rest) an apparent motion of all the Heavenly Bodies from east to west in the same space of time: a deception which all the penetration of the ancient philosophers could not enable them to correct; which

which affords a striking instance of the danger of trusting to appearances, and the evidence of our fenfes. By its diurnal rotation, the inhabitants of the equatorial parts are rapidly carried 1042 miles every hour: and we in this latitude of 50-14 north, in a proportion of about 38 to 60: while the earth itself proceeds at the rate of 58000 miles, in the same . space of time on its annual passage round the Sun: this amazing motion, though 120 times swifter than that of a cannon ball, is much less than that of Mercury: and however this may stagger the belief of many not used to such contemplations; if the Earth was supposed to be fixed, and all the Heavenly Bodies to move round it, as they feem to do, and as the ancients did, and many at this time, believe they do; principles must be admitted more shocking to probability in every point of view.

The

The Earth is accommodated with an attendant Planet or Satellite, called the Moon, which regards the Earth as a primary moving round it as the Earth does round the Sun: like the Earth, the Moon is a dark body, as all the Planets are, for the light they give is all borrowed from she Sun, by reflecting his rays: Her diameter is 2180 miles, and her distance from the Earth's centre 240,000 miles, revolving sound it in 27 days, 7 hours, and 42 minutes, which is therefore the length of her day and night. the Moon is between us and the Sun. the disappears, her dark side being then towards the Earth; and is then at her change: As the proceeds onward, we begin to see her enlightened side, which we call the New Moon: this increases to our view as the advances. until her enlightened face, being turned towards the Earth, she appears then with a full illumined Orb, which we term the Full Moon: to inhabitants

of the Moon, the Earth must appear the largest body in the Universe, serving her in the capacity of a Moon, thirteen times as large as she appears to us; and when she is in her first quarter to us, the Earth is in its third quarter to her, and so vice versa.

The Planet MARS is next in order beyond the Earth: His distance from the Sun is computed to be nearly 145 millions of miles, and he goes round it in 686 days and 23 hour's of our time; which is therefore the length of his year: The time of his diurnal rotation exceeds our's by 40 minutes: His diameter is 4444 miles. The Sun appears but half as large to his inhabitants as to us, and his proportion of light and heat is but half of what we receive. This Planet, being but a fifth part as big as the Earth, if it is attended with any Moon, it multibe very small, as none yet has been discovered.

C Jupiter,

## THE PHENIX.

JUPITER, the largest of all the Planets, is still higher in the System, being 493 million of miles distant from the Sun; he is full 1000 times as large as the Earth; his diameter 81 thousand miles; he accomplishes his annual period in 11 of our years, 314 days, 12 hours; and turns round his own axis in 9 hours, 56 minutes. Jupiter is fometimes seen with some faint appearances surrounding him, which are called Belts; but as fo many changes happen in them, sometimes vanishing entirely; nothing with certainty can be determined of them. He is attended with four Satellites or Moons, some larger and some smaller than our Earth: And as all secondary Planets are known to revolve round their primaries, so does Jupiter's round him.

SATURN is the most remote of all the Planets hitherto discovered; his distance from the Sun is about 904 millions of miles; his diameter 67 thousand miles; he

he is near 600 times the fize of our Earth: he performs his annual circuit in 29 of our years, 167 days, 5 hours: But having no spots in his body that are visible to us, at this distance, the length of his day is He is attended with five unknown. Moons that revolve round him as their centre; besides those Moons, Saturn is attended with a fingular Phænomena, being surrounded by a broad thin illuminated ring, about 21 thousand miles distant from him, and about the same breadth; one half of this ring is enlightened for near 15 of our years together: that is, for one half of Saturn's revolution, for fo long therefore will this ring be visible and invisible alternately. And what has been said of Mercury in respect to his heat, may also be said of Saturn; that his great cold is no obstacle to his being inhabited.

N. B. As the Planets all move in Ellipfis, it is their mean distances that are
mentioned: And as those distances are
C 2 calcu-

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calculated from the Transit of Venus over the Sun's disk in the year 1761, they differ widely from all calculations made and adopted before that period: And although the real distances of the Planets from the Sun may not be perfectly exact, yet their comparative distances are certainly true.

Having now finished my short account of the Planets hitherto known in this our Solar System, I proposed,

Secondly, to mention fomething of Comets in general, before I proceed to the most remarkable one ever yet noted; and which has been already mentioned in the title page, and in page the first: Besides this Comet we are visited by many others; they all move in very different directions, and in very eccentrick Ellipsis, and return at different periods: Their number noted by Astronomers is 21; though I am apprehensive they are more, and for the following reasons: Being at sea in the latter part of April or beginning of May

May, in the year 1746, I saw a Comet close to the two southernmost Stars in the Little Bear, so near that an indifferent, person might have taken it for a Star belonging to it, had it not been for its tail, which did not appear to the naked eye, to be above eight or nine inches long; it had no visible Atmosphere, and did not appear bigger than a Star of the fixth magnitude. It proving bad weather afterwards, I saw it no more. Afterwards being at sea on a passage to New-York, in the month of September, between the years 1764 and 1766; (for upon the most diligent search I could never find my Journals, where the foregoing, or the following Comets were noted in), being then in about 41 degrees North Latitude. and Longitude about 48 West, I saw a Comet about nine o'clock in the evening; it was on the first part of the month; when I first observed it, it was in the W. N. W. and N. W. part of the Heavens, about 15 degrees to the fouthward of the Point-

ers, or two fouthernmost Stars in the Great Bear; and seemed to have about 50 degrees of altitude; it being bad weather, Inever had but partial views of it, though at times I had a fight of it for about fourteen nights, in which time it feemed to have travelled about 20 degrees of the Heavens. Its direction, as near as I could guess, for I had no helps (and if I had, the badness of the weather would have rendered them useless) was towards the S. W. It appeared to be about the fize of a Star of the third magnitude, its atmosphere hardly visible; its tail, I thought rather bright, confidering its distance; it was rather of the bushy kind, and appeared to be almost three feet in length: As I never have in any Tables or otherwife, feen any accounts of the forementioned Comets (the first of which must have been at a very great distance) I am of opinion their number may exceed 21, three of which being calculated, are found to return at intervals of 75.

129, and 575 years; the first of which appeared last in 1758, consequently may be expected to return in the year 1833. The second's last appearance was in 1661, and will be again expected in the latter part of the year 1789, or the beginning of 1790. The third, and most remarkable one, made its last appearance in the year 1680. This Comet at its farthest recess from the Sun, is about 11 thoufand 200 million of miles (as was obferved by Sir Isaac Newton and others) while its least distance from the Sun's centre is about 400 thousand miles; at this part of its orbit, in going round the Sun, its swiftness was found to be that of 880 thousand miles in an hour. amazing length that this Comet flieth off to in the universal space, naturally suggests to our imagination the great distance between our Sun and the nearest fixed Stars, whose attraction the Comet cannot reach to return periodically to the Sun; and hints to us, that the fixed Stars, **Chining** 

shining by their own lustre, are all Suns (each surrounded with its several systems of Planets, in all which are something to praise God, probably in a more eminent degree, than is in the power of fallen man) the nearest of which is reduced to one point of vision. The near approach this Comet makes to the Sun is such, as would vitrify any known substance that we are acquainted with; the heat of which, at its last appearance, was calculated by Sir Isaac Newton, to exceed 2000 times that of red hot iron.

Comets always appear with a long transparent tail, extending from that fide which is opposite the Sun, both in their descent and ascent, the nature of which has given room for much controversy; but from the circumstances of their constant opposition to the Sun, it is not improbable that they may be their hucid Atmospheres; which although lost in the Sun on the enlightened side, may

thay nevertheless be visible in their shadows.

To come now, in the third place, to show, as proposed, that all those great and glorious bodies that fly through univerfal: space, move in a vacuum, or emptyspace, where no matter is contained; as, it feems most agreeable to reason and to Phoenomena. Accordingly weifind that all mediums which we are not acquainted with, do retard the motion of all bodies, in proportion to the denfity of: fuch medium. As the Planets therefore proceed with such uniform motions, it argues that the space in which they move! must be void of all sensible matter: this is further corroborated by observing the azure colour of the sky; where there is no matter to reflect the rays of light (whatfoever those rays by hypothesis are supposed to be) they will pass through all such void space, and leave it totally dark: Now, if the universal space is supposed

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posed to be totally dark, such darkness, feen through the enlightened atmosphere that furrounds the earth, will necessarily be fostened into an azure blue, and this we experience to be the colour of the sky, with this further evidence in favour of the position, that the darker and clearet the night, the Moon as well as the Sun being absent, of the deeper colour do we find the sky appear.... I will: add one reason more: The prodigious: force of attraction bestowed on those mighty orbs that fly through the universe is such, that all sensible matter, though indivisible (immaterial matter, if I may. use the expression) will float in the upper atmosphere.

I am now (fourthly) to show, that the fix days of creation were equal to six years, the better to show what happened at the Fall, of which (as I have already said) a Comet was the cause.

The account Moses gives us of the creation is short: Though it is cer-

tain from him, that this Earth was bringing into order (whatfoever change it might have undergone before) and was making fit to receive its new inhabitants, of which man was to be lord. We are likewise told by Moses, Genesis, chap. i. ver. 2. " that the Earth was without form and void, and darkness was upon " the face of the deep (which, I think, "implies a perfect Chaos, a state this "Earth was then in) and the Spirit of "God moved upon the face of the "waters." And in verse 3. "God said, "Let there be light; and there was "light." What follows to the end of the 5th verse, shows it was the work of the first day; the firmament and division of the waters was the work of the fecond. The waters subsiding, the dry land appearing, God next caused the grass, the herbs, and trees of all kinds to grow; all which was done on the third day, they all being necessary food for the land animals. The greater and D 2 leffer

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leffer lights and the Stars are particularised, which was the work of the fourth day. The production of the watery tribes and the fowls of the air (he tells us) was the appointment of the fifth day, The land animals were next brought forth, the grass, the herbs, and the fruit of the earth being come to maturity; and when every thing was fit for the reception of man, the chief guest, God in a most miraculous manner formed, made, or created him; for speaking in the plural, as if a confultation was to be held, he said, \*\* Let us make man in "our own image: And God formed " man out of the dust of the Earth" (as knowing the pride of man would be great, it was doubtless to humble that pride, he let him know of what coarse materials he was made) " and he breathed into his nostrils the breath of life, and " man became a living foul." But Adam, the first created man, having no proper

help-meet of which he complained: God . in as peculiar a manner made woman out of man, and gave them this commandment: "Increase and multiply and replenish the earth." Here I must beg leave to make some remarks on the word replenish (in doing which I shall find it necessary to digress) does it not imply to fill up fomething made empty; or place in the room of something taken away, or destroyed? Does it not signify the same, as if it had been said restock or repeople the Earth again: The same commandment was given to North as. from as he came out of the Ark: as in the 9th, chap, of Genefis, verse is where it cannot properly be taken in any other sense, than to re-stock, or re-people the Earth anew,

The reason for my suggestion is this; in March, 1763, I brought a clergyman passenger from New-York to Falmouth, and having no other on board, he and

I spent many hours in conversation; he "Was a German by birth, and a minister of the Reformed Church, was well acquainted with most of the modern, and a perfect master of the dead languages. I well remember when converfing one day on religious subjects (which we frequently did) it turned in particular on the passage alluded to; he said, that where the translation had rendered it, as in the 1st chap, Genesis and the 2d verse: And the Earth was without form and void:" it should have been became void: the fame word he added often occurred In the Hebrew language, of which he professed himself a thorough judge, where it was always rendered became except in the place now quoted; indeed he went fo far as to affert that Satan and his followers were the expelled, and that for their great crimes, and although it now remained a secret, he did not doubt but that it would one day be divulged

vulged.—In reply I told him, I, could not contradict him, but added that, though our Saviour in Scripture calls, Satan " the Prince of this World;" I thought it implied his dominion over the unruly wills and passions of men, rather than his Expulsion; but still he was fixed in his opinion, which, if just, the word certainly implied a prior inhabitant; and in that case it is as probable to have been Satan and his companions, as any other set of beings, they being so often mentioned in holy writ.

. But to return—I am to prove, that, during the fix days of Creation, a day and a year was the same (and it is very probable that the day of rest was of the same length; for as the Creator had appointed the feventh day to be kept holy; I therefore think it would be charging God with a breach of his Sabbath, to suppose any work of his took place during that day: it is also reasonable to think

think that Adam did not transgress until the beginning of the eighth day.) Now why a day and a year was the same is plain, from the Earth having no rotation round its own axis at that time; the only motion it then had, being its daily or annual course round the Sun, therefore it had one hemisphere almost continually towards him. And Paradifé with its furrounding country; where Adam with the first inhabitants were to be placed, was at or near the centre of the most illuminated hemisphere; which had received the greatest heat, in order to nourish the seeds in the Earth and in the waters, for the vegetables to spring and bring to life the creatures of all forts. Such productions have never happened fince, but by generation only.

Moses takes no notice of the length of the day during the fix days of Creation; yet as to the beginning I think he is plain, when he says, "the "evening

ee evening and the morning was the first day;" and so likewise of the rest; for the morning then began in the West, which has been our evening ever fince the Fall; therefore fince he is not particular enough on that head, I will attempt to prove it from other evidences; and although they will not be allowed divine, yet as those fages of antiquity were eminent for their great learning, for the goodness of their lives, I hope their testimony will have some weight (if the distance of time be considered, the waste it has made, with the havock of war, and other direful calamities, it is rather to be wondered that there can be any proofs brought, or traces left to The first I shall mention is Empedocles, for the length of the day, whose words Plutarch quotes. He favs. that " when mankind sprang originally " out of the Earth, the length of the " day by reason of the slowness of the Sun's motion was equal to ten of our " months." E

" months." which is to be supposed was the time of the Sun's being above the horizon which has been generally allowcd to be the length of the day; if to that we then add the great length of the then evenings and mornings with the twilights, those who are acquainted with the motions of the heavenly Bodies will agree, that the nights were of very short duration; for in the primitive state, that is, during the fix days of Creation, there was no Equator distinct from the Ecliptick; all motion was performed round the Axis of the latter, on its annual paffage round the Sun; fimilar to what the Moon does in her menstrual round the Earth; with this difference only, the Moon has always one side turned towards the Earth; the Earth had one hemisphere, that always pointed to one Plaga, or point in the heavens, opposite the Sun, when at its perihelion, if it had any (for it is generally

rally thought it had none, its Orbit being truely circular) and about the centre of the hemisphere that pointed to the Plaga, which had received the greatest heat, was Paradife with its furrounding country, where Adam and the first inhabitants were placed, which by its greater heat was necessary for the production of every thing, both animate and inanimate. This will I hope be fatisfactory, as to the length of the day during the fix days of Creation; not but that God by his fiat could have ordered all things in an instant; yet (as a learned Divine \* has observed on a like occasion) man could not, for Adam had a great deal of work to do the latter part of the fixth day; much more than could be done, had the paradifaical day been no longer than the present. The next Author I shall quote is Plato; who when giving an account of the heavenly Bodies rifing in the E 2 West

Bishop Patrick.

West, and setting in the East, in relating fome ancient traditions, delivered by. our first Parents, as he declares them to be, about the primitive state of things, and what a mighty change was effected, by a most remarkable alteration in the heavenly motions, he fays, "But I am " now about to speak of the change made " in the rifing and the fetting of the "Sun and the other Stars: namely " how they did formerly fet in the " same place where they now rise, and " rose where they now set; and how "God changed their course for that "which they have at present; " fometimes God himself directs the " motions of the universe, and at other " times, after so many periodical motions " as he sees fitting, he leaves it; where-" upon it is, as it were, spontaneously " carried about by a motion contrary to " the former." And further he fays, "This change ought to be accounted " the

" the greatest that any of the heavenly bodies undergo."

I think the evidence of Empedocles for the length of the day, and that also given by Plato for the change made in the rifing and setting of the Sun, and all the heavenly bodies, are strong proofs, that the six days of Creation were so many years. There are besides many of the ancients that bear testimony to the revolutions of the celestial motions, whom I think it needless to enumerate; I shall therefore leave it to those gentlemen that have time and opportunity to examine ancient history, where they will find matter sufficient for conviction.

I have in my reading met with a very ancient Rabinical Revelation, where it is faid, that when Adam was expelled Paradife, God showed him what was to happen until the end of the world, or until his posterity was destroyed, whereupon he was filled with grief and aftonishment at the evils they were to encounter,

encounter, of which he had been the cause: but he was soothed with the promise of a Messiah, and when he was shown the beautiful foul of David he feemed pleased, until he was informed, that it would not remain amongst men a year; he then prayed that 70 years might be taken from his own life, and added to that of David's. Accordingly we find from holy writ, that David lived threefcore years and ten, and Adam nine hundred and thirty; for it is faid and believed that if Adam had remained perfect as he came out of the hands of his Creator, he was to have lived a thoufand years; at the end of which he was to have been translated into a state of eternal bliss, without tasting of that bitter potion death.

Now supposing this story founded on truth, which I am more apt to believe than discredit (though I am not capable of believing every tradition which the

the enthusiasm of man has attempted to impose on the world) it is very reafonable to conclude that Adam was acquainted with prior as well as future events; for Christ who made him perfect and in his own image, must certainly have endowed him with larger faculties than any of his posterity, whose understandings were, we will suppose, greatly impaired after the Fall; from which I think we may also conclude that Adam was acquainted who the prior inhabitants were, and with the crimes for which they were destroyed or expelled. This adds to the confirmation of Plato's traditions, though the story of David was probably framed by the Jewish fathers in honour to their favourite King.

The cause then of the change as before mentioned was owing to the Earth's receiving a new motion at that time round its own axis from West to East, and which taking place at Adam's transgression, it is

no wonder he was fore afraid, expecting immediate death, as he had understood it (as the Earth must have been mightily convulsed and disturbed, by the collifion or near approach of a Comet at which we may suppose the very beasts of the field trembled). Adam therefore hid himself from the presence of the Lord God, but not meeting directly with what he so much dreaded, he and Eve, recovering from their fright, made themselves coverings of fig leaves to conceal their nakedness, which they had discovered and were ashamed of. We find too from Moses, that the Lord made them coverings of skins to keep their bodies warm: I think that had there not been a mighty change made by the new motion the Earth had then received, which rendered both that and the Air much colder, Christ the Lord would hardly have made or directed them to make them-**Elves** 

felves warm clothing of which they food in no need before.

That the Earth did not move round its own Axis, until the Fall, is I think plain: but whether the rotation it received at that time was as oblique to its annual motion round the Sun, as it has been ever fince, I will not pretend to détermine, though I rather think not, because Moses in the 8th chap. of Genefis and the last verse, tells us that God said to Noah; "While the Earth remaineth, feed time and harvest, to cold and heat, fummer and winter, \* day and night, shall not cease." Now we find that the notice taken of the feasons before is not in such strong terms; and, according to many of the Ancients, the Antediluvian days were more equal than the present, as was their year also, which consisted of 366 days; by that, and the greater purity of their Air, they account for the longevity of their lives, though I find

it impossible to account for the obliquity of the Earth's annual motion, and the diurnal rotation which it received at the Fall, and which continued until the Deluge. It is now known for a certainty, that the present obliquity is 23 degrees and 30 minutes between both motions (and has fo nearly continued the same ever since; that the very fmall alteration it has undergone is not worth noting) for which reason the Sun is in the Northern Tropick in June, and in the Southern one in December. each being 23 degrees 30 minutes distant from the Equator, on which the Earth performs its diurnal rotation, making the above Angle twice in the year with the Ecliptick, on which the Earth performs its annual circuit round the Sun: the First, beginning at the Vernal Equinox, or first point of Aries about the 21st of March; the Second, at the Autumnal, or first point of Libra, which happens nearly on the same day in

in the month of September; the two Angles making 47 degrees; to that alf that portion of the Globe which is contained between the two Tropicks is denominated the Torrid-Zone: fo called from the Sun's scorching hear; the Sun being vertical in some part or other of it continually. Again, for example; let it be observed, that if you put any circular body in motion; its rotation round its Axis will coincide with its progressive motion; and though the inequalities of the ground may throw it off (supposing it to be a Ball) from the direction given it by its first impelling force; still let that alteration be ever so oblique from its first direction, the rotation round its Axis will still agree with its altered progressive motion. This, it may be faid, will hold good, where any Globe or circular body has a folid basis to move on; but would not were they like the Planets, or other more erratick Bodies, that fly off to fuch F 2 prodigious

prodigious distances after they become invisible to our Eye: the Planets and Comets flying through empty space, having no folid plain to move on, it may be readily allowed, that they move in their several orbits without any rotative motion; which the Moon known to do as she always shows the same Hemisphere to our Earth; fince that is the case, we must seek for some other cause that gave the Earth a rotation round its Axis; it had none before the Fall; which I think cannot be accounted for, by the approximation, contract, or collision of a Comet, and that obliquely; for the Earth's rotation has no relation or agreement with its progressive motion round the Sun; therefore a Comet must have been the occasion; if it be allowed that all bodies have no rotation on an Axis but from a second cause; Venus, Mars, and Jupiter must have had their mutations as well as the

the Earth; their rotations must all have been in such a manner, and from fuch a cause as was the Earth's, and according to their several obliquities. The Planets are known to attract each other mutually, when they are in the same quarter of the Heavens; they never approach one another near enough to occasion any great changes.

Having giving my reasons why the fix days of Creation were fo many years, that the heavenly Bodies during that time rose in the West and set in the East, and that upon man's transgression the change took place; of which I believe a Comet was the cause; before I quit the subject entirely I shall endeavour to show the probability there is of tracing the Comet from the Fall to the Deluge. First, then, Adam and Eve, the once happy pair, having survived the terrible spock given to the Earth at that time, were enabled to tell the mighty tale to their children and children's children

for many generations, and no doubt (as Plato observes) but they did, consequently would tell the cause also, as Adam must have seen the Comet at its approaching the Earth. At its next return he would certainly see it again when he would be about the hundred and seventy fifth year of his age; not he only but likewise all'the then inhabitants, for in the Antediluvian state the air was pure, without wind or clouds, consequently there could be no rain. And although Adam was dead at the fecond return of the which would be about the 1150th year of the World, Noah, who was then living, and would be between the 30th and 40th year of his age, would with the then inhabitants fee it in a more perfect manner than ever the postdiluvian can, our air being quite different from what it was before the Flood. from the purity of that air and the number of years he had lived, must have been

a better astronomer than ever the Postdi-Invians can be; and not only Noah, but the inhabitants in general must have been men of greater talents than any of the present Age will ever be, knew more of Asts and Sciences, and doubtless the Art of writing was known amongst them (though perhaps hieroglyphical) yet I am of opinion that they were acquainted with letters, probably not the same as were in a few ages afterwards made use of by the Postdiluyians; this indeed is devigting very much from the general received opinion, that Moses was the first Pentrian, which however I cannot be persuaded of, although there are no traces left whereby to determine.

We find Noah foretold the Flood 120 years before it happened; probably from his own knowledge of the heavenly Radies; but the effects it would have upon the Earth, if he did not receive it from Adam, he must have known from God, who, we find, ordered him to propare

pare an Ark for the preservation of him's felf and family, and of all creatures both clean and unclean: As Noah and his family would fee the Comet before they entered the Ark, they would of course make it known to their posterity after the Flood, and also what was the cause: I have before said that the Comet which occasioned the change at the Fall would likewise occasion the Deluge, which may be perhaps objected to by many because the three periods between both æras do not exactly agree with the Chronology of that time: I think in the first place, that the Comet'speriods must have been shorter before the Deluge than they have been fince; in the next place, I think it in no wise criminal to fay, that Chronology before the Flood may bear a doubt as to its exactness; these two reasons will I hope in some measure account for the difference between them."

At Noah's death, Abraham must have been near fixty years old. He certainly must

must have had from Noah, his fores, or their immediate descendents a full aca count of the Deluge, and what under God was the cause. And if not an historical, at least a traditional account of the World from the Fall to the Flood. Abraham would not be the only person acquainted with it, but all those who lived at that time, who were as well as he capable of handing it down to their posterity. But soon after the death of the Patriarch, his descendents in Egypt; the Israelites, were held in cruel bondage (exer the patent of Ignorance) whereby they loft all knowledge, and would for. ever have been lost themselves, had not. God, in a miraculous manner, preserved Moses by Pharoah's Daughter, who was afterwards brought up in her father's Court, where he acquired all the learning of the Egyptians, at that time the most. learned of all nations on Earth. Thus prepared he became, a proper instrument. in the hand of God, to be a ruler and **leader** 

of his people out of Egypt, and out of bondage. But though Moses were ignorant and stubborn, for which reason they gaid him full employment.

Moses gives but a short account of the Deluge. He says, that for the sites of mankind God brought a mighty shows upon the Earth, that " the gates of heaven were opened" (alluding I super pose to the forty days rain) " and the spoken." But as his account of this tone tained in the 7th Chapurof Genesis; from the 27th verse to the end, I hig leave the refer the Reader to it.

But although Moses takes no notice of what was the immediate cause of the Deluge, there are many passages in Anciont History to be found, which declare that a Comet did pass by at that time and was the cause. I shall mention after authors, the first of whom is Plass; who (speaking of the Deluge) assigns a Comet

Connection that saule; the next is Pliny. who in all prebability had it from the Egyptian records (from whence I liet lieve most of our information of what happened in the primitive state of the World came; of which I shall make more mention hereafter) he does not only speak of a Comet's passing by at the time, but also mentions the direful effects it had Mr. Whiston says troop the World. that differelina in his Comptographia. bears tellimony of feveral ancient authors who fpack of the directal effects of a Comet that appeared in the reign of Typhon, that is at athe Deluge, or immediately before it is nay, he lays further, that in ancient; books and records there ane accounts of a Council's passing by at the Deluge. From my slender acquainsance with the dead languages, but more framewant of time, I have not been able to trace this remarkable. Comet from the Fleod. the first account I have met with. fince that time, is its appearance in the

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year

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year 44 before Christ, the same year that Julius Cæsar was slain in the Senate: but its first return after the flood, according to its period, would be about the time Ishmael died, or near thirteen years before the Death of Isaac; its second return would be about one thousand one hundred and ninety eight years before the coming of Christ, or some little time before Jair judged Israel; its third - period must have been in the reign of Josiah over Israel; and its fourth return was, as I have taken notice, in the year 44 before Christ, which is the first time that I can give any historical account of it; yet I am fully perfuaded that its feveral returns happened about the times I have remarked, and were registered by many, but lost, or otherwise destroyed long ago. But, as before observed, in the year 44 before Christ, many bear testimony of its appearance, particularly Suetonius, Plutarch, and Pliny: the latter makes use of Augustus's own words as his voucher; "On " those

" those days (fays Augustus) when I was exhibiting some games to the peo-" ple, a Comet appeared for seven days " together." Perhaps dark and cloudy weather prevented its being longer feen or it might have been visible both before and after the feven days though not noted by Augustus. "It was a remarkable " one, and visible all the world over, the " common people imagined that it fig-" nified the reception of the Soul of " Cæsar into the number of the immor-" tal Gods, on which account the image " of that Star was added to the Statue. " representing Cæsar's head, which we " awhile after confecrated in the Forum." Probably this was to feed his pride, as the Cæfars would have it believed that they sprang from the Gods.

I shall trace this Comet no farther at present but proceed,

Fiftbly, to prove, that the Comet is that so much celebrated emblem of An-

Antiquity (perhaps of the refurrection also) the Phanix.

The Phænix is most certainly an Egyptian hieroglyphical representation of the Comet.

· Now as Egypt was one of the first and a fettled monarchy, at the time that. Abraham went thither, which was about the hundred and thirty fifth year of his -Age (for though we have no account of the Learning of the Egyptians at that time, yet we have of their Justice, from the King's behaviour towards Abraham andhis wife) to me it would appear abfurd to think that they were not at that period more learned than ever they were after, parcularly after they had fallen into the groffoff Idolatry, when they not only worships ped things animate but things inanimate. And, as I have said before, that Abraham was about fixty years of age at the death of Noah, if to that we add feventy five years, which was the time of his being in Egypt, many of the Egyptlans then living must have been conversant with Noah

Noah and his sons, as well as Abraham had been, for which reason we way suppole that not only the Deluge but every remarkable event that had happened in the Antediluvian and Primitive state of the world was transmitted down by that family, and retained by the Egyptians, and for ages the period above mentioned. Amongst the many things delivered by Noah, I believe the Phanix to be one; which as well as most of those he left was in hieroglyphicks, a figure which the Egyptians retained longer than any other people. The Phanix, according to their account, is a Bird that once in nearly 600 years goes down to the Altar of the Sun. is there burnt to ashes, out of which a young one springs and flieth off (a very improbable story). There is another story. told of this bird, which comes from the Arabians, the descendents of Ishmaole they say, that this, Rara Avis, the Phaning once in five or fix hundred years, comes into Arabia, in which country it buildeth

## THE PHENIX.

its neft, with spices and perfumes, setting itself therein, till by the great heat of the Sun the nest taketh fire and is burnt with the Phænix, out of the Ashes of which a young one arises and immediately flieth off. This story so differently related is rather worse account than that given of it by the Egyptians. It is also probable that the Chaldeans, and most, if not all the primitive tribes and nations that were the more immediate descendents of Noah and his sons, had the knowledge of the Phanix; which, owing to the distance of time, place, and different languages, was differently related, and at last by war or other direful calamities was entirely loft; and I must allow that the story, as handed down to us, has more the appearance of fiction than of one founded on facts; therefore I shall attempt to prove, in the best manner I can, that the Comet, whose last appearance was in 1680, is the real Phanix of the Ancients.

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The Phanix is said to be a bird about the fize of an Eagle, and not much unlike one; that it returns once in nearly fix hundred years, goes down to the Altar of the Sun, is there burnt, and a young one springs out of its Ashesand flieth off again. Now I will suppose the Phanix to be a bird much like an Eagle: I will further suppose it to be one thousand times as big, and that it should fly before you in full view, on its passage down to the Sun: how far would it be possible to follow it with the naked eye?—nay even affifted with the best glasses? Assuredly not far-but let us view the Comet in the same light, it will then plainly appear, that this Comet and the Phenix of the Ancients are one and the fame.

The Comet's periods, one with another, are upon an Average about 575 years: this certainly agrees with the return of the Phanix, which is faid to be about 600 years: Secondly, the Comet's flight and quick passage through the heavenst H Thirdly;

Thirdly, its tail, both which are common to birds in general: Lastly, the Comet's going down to the Sun, where, by the violence of the Sun's heat, it is terribly burnt, and when it returns, in flying off again, it is then called the young Phænix; and let it be further observed, that the Comet is of such a magnitude, that it can be easily followed with the naked Eye (if the heavens are free from clouds or mists) either in its descent to, or affent from the Sun, all which duely considered, proves, I think beyond a doubt, that this Comet, and this only, is what has been called the Phænix.

I am now to go back again to the year 44 before Christ; which, as I have before said, is the first time I could give any account of the Comet's appearance since the Deluge; now its next expected return would be about the year 531 or 532; that it did appear again at that time Lubienietz gives an account of in his catalogue of Comets, and Zonarus, the original histo-

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rian, says that in the 5th year of the Emperor Justinian, A. D. 53 a Comet appeared of that fort which is called Lampadias, and continued to shine for twenty days together; it sent its bright tail upwards; which words exactly agree with this Comet. The next period when it would be expected was A. D. 1106, at which time historians are full of it: especially Hevelius and Lubieneitz, their accounts of which being collective I will relate fome in their own words. "A. D. 1106, "we saw a Comet of wonderful bright-" ness. from the first week in Lent till " the passion of our Lord. An extraordina-"ry star seen to shine this year on Friday 44 in the evening Southward and West-" ward and appeared bright for twenty five "days together."—" A. D. 1106, in the "month of February, two days after the " newMoon, a great Comet appeared South "Westward." "A. D. 1106 a Comet " appeared like fire, almost all the month " of February."—"A. D. 1106, a dreadful H 2 Comet

"Comet appeared from the first week in Lent, till the vigil of Palm-Sunday. "Same year the Emperor Henry the Fourth died."

The last time of this Comet's appearance was in the year 1680, when it was observed by many, especially by three famous Afttonomers of our own Country, Sir Isaac Newton and the Doctors Halley and Flamstead. Dr. Halley has these remarks: "No " Comet (says he) has hitherto threat-" ened the Earth with a nearer appulse \*\* than that of 1680, for I find by " calculation that on Nov. 11th at 1 hour 6 minutes after noon, the Comet was not above a Semidiameter of the Sun "to the northward of the way of the Earth, at which time had the Earth "been in that part of its Orbit, the " Comet I think would have had a " parallax equal to that of the Moon:" The former observations (said " are supposed to be spoken to Astronomers;

"mers; but what might have been the confequence of fo near an appulfe, or of a contact, or lastly of a Collision of those celestial bodies (which are none of them impossible) I leave to Philosophers to discuss."

Since then this Comet has been feen three times fince the year 44 before Christ; and has been always noted for the remarkable brightness and splendour of its tail, its position in the heavens being always nearly the same when in its descent and ascent, its nodes are still so near the Earth's Orbit, that it is agreed by all those who have examined, and are acquainted, with the heavenly motions, to be the only Comet yet known that could have been the cause of such mighty changes as happened to this Earth at the Fall and at the Deluge.

Dr. Halley and others have obferved, that the Cometary Orbits are most easily disturbed by the occasional nearness of their Comets to all other bodies, bodies, and especially the Comet here spoken of, as it approacheth nearer to, and slieth farther off, from the Sun, than any other; for which reason it is rather to be wondered that so little difference has happened in its periods as we find.

The first four periods from the Deluge will be found rather more than 576 years; which Mr. Whiston has calculated with great exactness; for he makes the Comet to pass by the Earth the very day (according to Moses) that Noah entered into the Ark. The first two periods, from the year 44 before Christ to the year 1106 after Christ, are about 574 of years each; and from February or March 1106, to the fame months, 168°, when this Comet was in about the same position again, or in the same part of its Orbit, these are as nearly as possible 575 years; when the Comet's periods hereafter are better ascertained, and Cometick Astronomy better

better understood, it may perhaps appear, that many of the Comets, which return into these regions in a much shorter time, will differ more than the periods of the Comet of 1780. From what I have now said, I think it a sufficient argument for supposing, that the Comet's return was much shorter before than since the Deluge, and I think the same will hold good when I come to treat of its periods during the Millenium.

Let it therefore be observed, that when the Comet passed by the Earth at the Deluge, it approached so near it that it did not only alter the Earth's Orbit by the Earth's moving in a longer Ellipsis, which afterwards lengthened its year (as I shall show presently) but it occasioned mighty convulsions, by attracting it in such a manner, as to draw it from a Globe (its real form) to an Egg, or elliptical form, during the time of its greatest attraction; which I think Mr. Whiston

Whiston fixes to have been at or near the borders of China, where it would be acted upon with more violence, which as I have observed drew it to the form of an Egg, and separated the old world from the new, occasioning the two great Chaims which afterwards became receptacles for the acquired waters, denominated long fince the Great Atlantick, A Pacifick, or Great South-Sea: for during the greatest attraction the Earth, by being loofened and its parts rent, would cause the internal waters to burst forth, as they would yield more readily to the attractive force than the folid parts; which waters uniting with those that fell in such prodigious torrents for forty days were capable of covering the highest hills sifteen qubits, At the same time we must conclude that the Comet (which by some is allowed to be ten times as big as the Moon) must have been affected in a proportionate degree, or nearly so, some allowance being made for the greater velocity of the

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the Comet; for which reason during that space I think its orbit and period must have been considerably altered. I am now

Sixtbly, to show, why the Comet at its next return will occasion the conflagration, the destruction of the then inhabitants, and commencement of the Millenium.

But first I would premise a few things: As the Comet preceding the Deluge had been mightily cooled in the extreme cold and far distant regions from the Sun; it being at that time going to its perihelium, and passing near the Earth; the earth at the same time passing through its Atmosphere, and Tail, which was heterogeneous; would carry off with it a Cylinder of prodigious length, whose diameter would exceed a60 degrees, and which containing a great quantity of water must have caused the forty days rain mentioned by Moses; the earthy particles which were mixed with the waters in its then rude state (would subside as

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as the Comet had passed by and laid a new Strata, the Earth then beginning to recover its form, the foul chaotick matter drawn from its atmosphere, filled the atmosphere of our earth with noxious vapours, that made our air very unwholesome, which soon reduced the life of man to its present standard. quantity of matter drawn from the Comet's atmosphere was (according to Mr. Whiston) chiefly the cause of the Earth's flower rotation on its Axis; for by his calculations 291 of the Antediluvian days were equal to 30 of the present; and he further says, that the Comet's attracting the Earth at the same time altered its annual orbit into a more eccentrick Ellipsis, which was the cause of the year's being lengthened five days and upwards, which to me seems most reasonable.

I think it will not bear a doubt but that Noah and his family knew well the length of the year before the flood, but were were ignorant of the alteration made in the Post-diluvian year. He therefore, and his Sons, making use of the Antediluvian year (which was 360 days) their posterity, following their example, were reconciled to an error they could not furmount. At last, by the seasons altering fast. different nations followed different methods: some reckoned by the Sun, others by the Moon. The last of which methods prevails among the Turks, and most Eastern nations, to this day.

The Egyptians added five days to the end of their year; which days they called adventitious days, or days of Nothing. They thought that their Gods were on those days, either sleeping or taking their pleasure, for which reason they spent them in feasting, idleness, or wantonness. And, according to some of the Spanish historians, Cortes sound a similar custom prevail amongst the Mexicans when he conquered their I 2 country;

country; who during those days forbore their facrifices. Indeed I have never been able to discover that there was any regular account made of the year until the time of Julius Cæsar, when it was first regulated to any degree of exactness.

I have already faid, that at the Deluge the Comet was in its descent, or going to its Perihelium; which I did the better to elucidate my fixth proposition. I have now to observe that at the Comet's nex return to the Sun, where it will be terribly bornt, its atmosphere all fire, then in flying off to its Aphelia, and in passing by the Earth at the same time so very near, it will receive a violent shock by the Comet's near approach and great attraction, which in the Earth must occasion mighty cracks and fisures, by the parts most attracted endeavouring to fly off. The internal fires then breaking forth, and mixing with the fiery atmosphere just drawn from this Comet, will certainly

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certainly be cause sufficient to destroy every living creature on the face of the Earth, and will produce the many figns and wonders fo often mentioned in holy writ; which must inevitably fill with terrour the inhabitants on the moments preceding their dissolution; previous to which time I have faid the Comet will be going to its Aphelia. Supposing then the Earth at the same time should be going to its Perihelia; two hodies (though in oblique directions) moving with fuch prodigious swiftness as they are known to fly with, must occasion their approach to be almost instantaneous. But supposing the contrary; and that the earth as well as the Comet should be going to its Aphelia; even in that case the Comet would approach the Earth so rapidly, as to occafion the Conflagration to be very sudden, the Comet's motion exceeding that of the Earth's almost to a degree of incredibility.

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Our Saviour (speaking of that day) says, it will come like a thief in the night; which I think implieth its suddenness. Again (he says) "Of that day none knoweth but the Father." He therefore bids us watch and pray, which is most assured to the way to stand prepared for every event. What our Saviour has said will convince the Christian of the sudden coming of that day without having recourse to Astronomical calculations.

I have several times before mentioned, that the Comet's last appearance was in the year 1680; it was then going to its perihelia; if to that number we add 575, its average period, it will produce 2255, the latter part of which year, or the beginning of 2256, may be the time in which all the remains of Adam's race will fall in one general ruin.

For my own part, I am fully satisfied of the truth of my hypothesis, namely, that the next return of the Comet will occasion the so much expected Constagration,

gration, expected I say-because, from all the researches I have been able to make, it appears to have had its origin in the Antediluvian world, and that Noah for reasons before mentioned brought the account out of the ark with him; yet notwithstanding those reasons are satisfactory to me, I have not the presumption to think they must be so to others, amongst whom many may require such proofs as must amount to demonstration: for such a task I profess myself incapable, being neither furnished with materials possessed of abilities sufficient. I will however bring to my affistance the Sacred Scriptures, wherein is mentioned in many places of the New Testament the destruction of the inhabitants of this earth by Fire. In the Old Testament likewise many of the prophets seem to point out a time for the coming of Christ's kingdom, as not far distant from the next return of the Comet; but as I am not able to give a proper explication of all the prophecies

phecies contained therein, relative to the Millenium, I leave it to the superior talents of those, whose more immediate business it is to interpret and explain the mysteries contained in holy writ.

To proceed: now the next return of the Comet of 1680 may be expected about the year of Christ 2256, which, according to Chronology, will be in the year of the World 6259. There is a Tradition that this world is to continue 6000 years, at the end of which the Millenium will commence; indeed I do not think, that the exact number of fix thousand years is to be understood otherwife, than that at the end, or after the expiration of them, the mighty catastrophe will happen to this Earth and its then inhabitants; when the Just will be raised, and Christ's kingdom begin, (for it is a doubt with many whether the Unjust will then be raised, that is, those who died in their Sins will have no share in the first Resurrection) an account of which I think

think is fully set forth in the twentieth chapter of the Revelations, to which I shall beg leave to refer the Reader and proceed to my

Seventb and last heads wherein I propose to show that the Comet which occasioned the foregoing catastrophy will be the cause of the general Conflagration and finishing of all things with respect to this Earth.

Let it therefore be observed, that the Comet's second return, after the Conflagration, will amount to about 1150 years, if its periods are not greatly altered, for at the Deluge it is certain that the Earth's annual motion, or year, was lengthened, and for the same reason it is natural to think the Comet's periods were also, as it was going to its Perihelia. And as I am firmly persuaded that when the Comet will occasion the Conflagration, at the commencement of the Millenium, it will be going to its Aphelia, a contrary reason may be affigned for the probability

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of its periods being shortened, when it puts an end to Adam's race upon Earth. And what I have before observed as relating to the exact number of fix thousand years, may for the same reason be applicable to the Millenium, or the precise number of one thousand years, supposing the Millenium took place immediately after the Conflagration, therefore I say that this Comet may, by the appointment of God, from the beginning, or fince this world was framed, be the destruction of this Earth: for should the Comet in its descent to the Sun hit against the Earth, the Earth being in its descent also, their motions and directions at the same time in fuch relation one to the other that when united might go directly to the Sun, they both must inevitably be swallowed up for ever in that mighty body, which in all probability will be the case.

Sir Isaac Newton and others were of opinion, that bodies have been often drawn to the Sun: the following reasons will

will serve to illustrate this opinion. First, that notwithstanding the mighty waste there must be of the Sun by its continual burning, yet there is not, nor ever have been, any observed, as his diameter doth not lessen or his body diminish. The other reason is, that some dark spots at different times are seen on his surface, and not always in the same place, which they believe were bodies drawn to the Sun. by his great attraction becoming powerful for the volocity of fuch orbs; and defigued by the Almighty Director to supply the waste which such a perpetual burning must occasion; and not as some of the ancient Philosophers fancied, that the Sun was a body of gold in Fusion; they argued thus, that gold will remain in Fusion without wasting.

As I have before observed that the Earth and the Comet were going to the Sun, I will now suppose the contrary, and that they should be going to their Aphelia, in which, as before said, should

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the Comet hit against the Earth; it would in either case be carried away, and with a mighty noise, so as to be no more found amongst its fellow Planets, and in this latter case would become a Comet. The Earth will likewise be removed from its present station when the Conslagration shall happen, that precedes the Millenium: for we read there will be no night but a perpetual day.

I have now finished all that I at first intended, I am nevertheless resolved to add the following by way of Illustration, with some further thoughts and remarks which since I began the foregoing is I think very necessary.

That the Sun is vastly bigger than any other Planet or Comet that we are acquainted with, I have before remarked; I shall now make it appear, that he is considerably larger than all the Planets were they joined together in one body; this I mean to demonstrate, by adding their diameters together and reducing them

them into one sum, by which will be shewn how much the Sun's diameter exceeds them all, and for ought we know could all the Comets' diameter's be also added to the Planets the Sun's even then might be found to exceed the whole. The diameters of the Planets are as follows.

Mercury Venus	Miles 2600 7906		diameter ooo miles
The Earth	7970	 1,231	
The Moon	2180		
Mars	4444	•	
Jupiter	81,000		
Saturn	67,000	173,	100

173,100 proof- 589,900 .

The foregoing sketch will I think show how small the Planets are when compared to the Sun, which to make appear still plainer I have added the following Plate, wherein the Planets are laid down in their just magnitude as near as possible on the Sun's disk, whereby their disproportion to the Sun, and their difference one to another, may be taken in at one view.

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The Planets are laid down from the Sun's centre at the distances mentioned as follows, it being impossible to regard any of their real distances from the Sun or from one another, except the Moon's, whose is laid down at her just distance from the Earth's centre:

y or Mercury is 36000 miles distant from the 2 or Venus is 65000 Sun's centre

Or the Earth is 95000 miles distant from the Earth's centre

or Mars is 14500 miles distant from the 24 or Jupiter is 246500 Sun's centre

b or Saturn is 300000

The Sun and Planets being now laid down in their just Proportions as exact as possible, so that by inspection only their differences will be distinguished; let it be observed, that the two superior Planets, viz. Jupiter and Saturn, bear some proportion to the Sun, but the rest hardly any at all. And although the Sun is such a mighty body, what is he when compared to this our system only: were it possible

Mara

Vernus

Mercuty



possible to remove ourselves to the verge of it he would be reduced nearly to a mathematical point, or at most would not appear much above as big again as Sirius (one of the nearest fixed stars) does to us now. But when compared to the myriads of solar systems he will bear no proportion at all: not so much as a drop in the Ocean: or according to the prophetick expression as a dust in a balance.

As to the Earth we inhabit, though in itself a mighty body, it will be found very small when compared to the Sun only, as may be seen by referring to the Plate. Is it therefore reasonable to think as the bulk of mankind have done and still do, that all those glorious Orbs contained in the boundless space were framed and brought into order, during the fix days of Creation, and designed only to sparkle to us in our winter Evenings? The Sun we see and seel his insluence: the Moon has her's also: as she is abundantly nearer to us than any other body, being a companion

panion to our Earth. Venus and Mars have some influence, but the rest of the Planets from their great distances canhave very little on our mundane affairs. But when we come to the fixed stars: myriads of them are removed to fuch immense distances that they are not visible to the naked eye, it cannot therefore be supposed that they have any influence at all throughout this whole system. Sirius, as I have observed, is one of the nearest, according to our best and most accurate observers of the celestial bodies; and is computed to be above 32-000-000-000-000-or bimillion of miles distant from our Sun.

Can it therefore with justice be thought that so wise a being, as God is, could act in such a manner, as to make all those glorious bodies, at the same time, and for the accommodation of man only, Man, the meanest perhaps of all created beings, who hopes for immortality, being reduced to such a state by the Fall? I must

must confess I cannot think so: should certainly accuse that Prince of great folly, who should build a grand and superb palace for the reception of one of his most menial fervants, and at the same time erect a miserable hovel for himself to dwell in; yet, notwithstanding, we can attribute any thing to God be it ever True it is, that the cefo abfurd. lestial bodies are placed in such beautiful order that they appear like so many precious gems in a rich Canopy: fuch an one none but an Almighty Architect could produce and present to our view: a workmanship of such beauty and magnitude that it is with wonder and amazement we behold and contemplate them; which is indeed the only benefit we are like to receive from them in our present state. Let us not therefore think so meanly of the Almighty, but ascribe to him all Wisdom: believing that his creative power and all other his attributes were from all beginning (a time we know not) L ís

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is now, and will for ever continue immutably the same. To him then be allowed what is most justly his due; all power, and glory, might, majesty, and dominion, now and for ever,

AMEN!

FINIS,

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